

## SHORT NOTES

# Replacement names for Permian stauraxon radiolarians

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**Abstract.** New names are proposed for two genera of Permian stauraxon radiolarians to correct existing homonymy; the replacement names are *Raciditor* Sugiyama for *Nazarovella* De Wever and Caridroit and *Kimagior* Sugiyama for *Deflandrella* De Wever and Caridroit. This action makes the family Deflandrellidae De Wever and Caridroit invalid according to Art. 39 of ICZN (1999), therefore the family Kimagioridae is established to replace Deflandrellidae.

**Key words:** *Deflandrella*, *Nazarovella*, replacement name, Permian, stauraxon radiolarians

## Introduction

Radiolarians are diverse marine zooplankton having a long evolutionary history beginning, to our knowledge, with the Cambrian period (e.g., Won and Below, 1999). When discussing the evolution, phylogenetic classification and systematics of the Radiolaria of a particular period or era (e.g. Permian, Mesozoic), it is essential to establish a geological-historical context by examining materials of the preceding and subsequent geologic ages. This approach to research will ensure correct knowledge of the characteristics of each period or era.

However, most radiolarian researchers tend to specialize throughout their careers in the radiolarians of a particular geologic age. For example, those working on Paleozoic radiolarians generally do not have a basic knowledge of Cenozoic radiolarians. At the least, when we establish new taxa, it is necessary to consult a variety of monographic studies on radiolarians of other geologic time periods to avoid taxonomic confusion created by the creation of homonyms and synonyms.

In this short paper, I introduce new names for two genera of Permian stauraxon radiolarians which are junior homonyms. The invalid names were originally in honor of famous radiolarian researchers. When creating such names, particular attention should be paid to the likely possibility of the names already having been employed by other researchers.

## Systematic paleontology

Superfamily Ruzencevispongacea Kozur, 1980

*Remarks.*—Some researchers have used the name Latentifistulidea Nazarov and Ormiston, 1983, for this superfamily (e.g. Nazarov and Ormiston, 1983; Sashida and Tonishi, 1986). However, this is obviously an invalid name

according to Art. 36 of ICZN (1999), as mentioned in detail by Kozur and Mostler (1989).

Family Ormistonellidae De Wever and Caridroit, 1984  
Genus *Raciditor* Sugiyama, new name

Not *Nazarovella* Kozur and Mostler, 1979, p. 68 (type species: *N. tetrafurcata* Kozur and Mostler, 1979).

*Nazarovella* De Wever and Caridroit, 1984, p. 101 (type species: *N. gracilis* De Wever and Caridroit, 1984).

*Type species.*—*Raciditor gracilis* (De Wever and Caridroit) = *Nazarovella gracilis* De Wever and Caridroit, 1984.

*Remarks.*—The generic name *Nazarovella* was first used by Kozur and Mostler (1979) for Triassic spherical radiolarians (spumellarian or entactinarian) possessing isometrically arranged spines with a quadrifurcated tip. Based on Arts. 23 and 60 of ICZN (1999), therefore, the replacement name *Raciditor* is given herein for *Nazarovella* proposed by De Wever and Caridroit (1984), who studied Permian stauraxon spumellarians from the Ultra-Tamba terrane of SW Japan, and named those stauraxon spumellarians having one short horn and three, long and grooved arms forming a flattened-tetrahedral structure as *Nazarovella*.

*Etymology.*—Named by use of an anagram of the family name of Dr. M. Caridroit, who first made excellent studies on the Ultra-Tamba terrane, SW Japan, using radiolarians. This name is of masculine gender.

Family Kimagioridae Sugiyama, new name

Deflandrellidae De Wever and Caridroit, 1984.

*Type genus.*—*Kimagior* Sugiyama, described below as a new name for *Deflandrella* De Wever and Caridroit, 1984.

*Remarks.*—Since the type genus of the family Deflandrellidae De Wever and Caridroit, 1984, is a junior homonym as discussed below, a replacement name for the

family is called for based on Art. 39 of ICZN (1999).

Genus *Kimagior* Sugiyama, new name

Not *Deflandrella* Loeblich and Tappan, 1961, p. 227 (type species: *Campylacantha cladophora* Jørgensen, 1905).

*Deflandrella* De Wever and Caridroit, 1984, p. 99 (type species: *D. manica* De Wever and Caridroit, 1984).

*Type species.* — *Kimagior manicus* (Deweever and Caridroit) = *Deflandrella manica* De Wever and Caridroit, 1984.

*Remarks.*—Since the generic name *Campylacantha* had already been used, Loeblich and Tappan (1961) introduced a replacement name *Deflandrella* for a homonymous name, *Campylacantha* Jørgensen, 1905, which was established for a plagiacanthid nassellarian from Norwegian plankton materials. Some radiolarian researchers have regarded *Deflandrella* Loeblich and Tappan as a junior subjective synonym of *Neosemantis* Popofsky, 1913 (e.g. Goll, 1979), whereas others have treated *Deflandrella* and *Neosemantis* as independent genera (e.g. Petrushevskaya, 1981). In any event, *Deflandrella* proposed by Loeblich and Tappan (1961) still remains valid taxonomically, which means that the identical name *Deflandrella* used by De Wever and Caridroit (1984) for Permian stauraxon spumellarian with three coplanar tubes is invalid.

*Etymology.*—Named by creating an anagram of a local place name, Kamigori, Hyogo Prefecture, SW Japan, near the type locality of the type species. This name is of masculine gender.

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